

HR70-14

TOP SECRET

995
CENTRAL INTELLIGENCE AGENCY
WASHINGTON, D.C. 20505

19 April 1978

MEMORANDUM FOR: The Director of Central Intelligence

FROM : John N. McMahon
Deputy Director for Operations

SUBJECT : [] Report

1. Enclosed is a [] report. For convenience of reference by NFIB agencies, the codeword [] has been assigned to the product of certain extremely sensitive agent sources of CIA's Directorate of Operations. The word [] is classified [] and is to be used only among persons authorized to read and handle this material.

2. This report must be handled in accordance with established security procedures. It may not be reproduced for any purpose. Requests for extra copies of this report or for utilization of any part of this report in any other form should be addressed to the originating office.

[]
John N. McMahon

[]
TS 788136

Copy # 9

[]
-1-

~~THIS DOCUMENT MAY NOT BE REPRODUCED~~

TOP SECRET

~~TOP SECRET~~

-2-

Distribution:

The Director of Central Intelligence

The Director, Defense Intelligence Agency

The Assistant to the Chief of Staff for Intelligence
Department of the Army

Director of Naval Intelligence
Department of the Navy

The Assistant Chief of Staff, Intelligence
US Air Force

Director, National Security Agency

Deputy Director of Central Intelligence

Director of the National Foreign Assessment Center

TS 788136

Copy # 9

~~TOP SECRET~~

TOP SECRET

8/13

11 PP



-3-

Intelligence Information Special Report

COUNTRY Poland

DATE OF
INFO. November 1977

DATE 19 April 1978

SUBJECT

Construction of Warsaw Pact Tropospheric
Communications Lines in Poland

SOURCE Documentary

SUMMARY:

This report is a translation of a Polish document classified SECRET, addressed to the Chief of the General Staff of the Polish Armed Forces, and entitled "Official Memorandum on the Construction of Permanent Tropospheric Lines on the Territory of the PPR." The memorandum outlines plans for the construction of a tropospheric communications network comprising 10 stations and 6 multiplex facilities connecting Warsaw Pact Combined Armed Forces Headquarters and simultaneously improving Polish military communications. The 24-channel capacity of the system will be allocated between Combined Armed Forces requirements (70 percent--16-18 channels) and those of the Polish Armed Forces (30 percent--6-8 channels). The three enclosures are: 1) A table that breaks down cost figures in rubles and zlotys for the individual components and total network; 2) A map that shows the location of the stations and facilities and their interconnections; and 3) A chart giving the technical characteristics of the new long-range R-410M tropospheric set which is to be used in the network.

END OF SUMMARY

TS 788136

Copy # 9

TOP SECRET

~~TOP SECRET~~

-4-

SECRET

CHIEF OF THE GENERAL STAFF
OF THE POLISH ARMED FORCES

OFFICIAL MEMORANDUM

On the Construction of Permanent
Tropospheric Lines on the Territory
of the Polish Peoples' Republic

With reference to the letter of the Chief of Staff of the Combined Armed Forces and the discussions which took place with the representatives of the Staff of the Combined Armed Forces on the subject of planned development of tropospheric lines, I am reporting:

1. On the basis of information received from our Soviet comrades, the USSR has developed 24-channel tropospheric sets with a "flight" [przelot] range of about 300 kilometers, which presently are undergoing government tests, but which will still go into serial production within the current 5-year plan.

Considering the greater capacity of these sets, the Staff of the Combined Armed Forces is of the opinion that, for its needs, about 70 percent of the communications potential (16-18 channels) would suffice in each direction, while about 30 percent of the potential (6-8 channels) could be utilized for the needs of the Polish Armed Forces.

TS 788136

Copy # 9

~~TOP SECRET~~

~~TOP SECRET~~



-5-

In this situation, the most suitable variant would be the development of tropospheric lines with a disposition as shown in the sketch (Enclosure No. 1). Such a disposition of the tropospheric network paralleling the directions of interest of the Staff of the Combined Armed Forces would also allow simultaneously for improving the reliability of communications of basic links: the General Staff of the Polish Armed Forces--military districts and the Navy; the Central Command Post of the National Air Defense Forces--command posts of the National Air Defense Corps; and in communications between these command posts.

2. For realization of the proposed tropospheric network, 10 stations and 6 multiplex facilities would be required. In addition, we would need to lay about 50 kilometers of ground connecting cable and build reinforced structures for terminal stations. About 250-300 personnel will be required to service the tropospheric stations.

TS 788136

Copy # 9

~~TOP SECRET~~

~~TOP SECRET~~

-6-

The table below shows the approximate cost of the undertaking.

Item	Designation of Equipment (Project)	Required Quantity	Unit Cost		Total Cost	
			in thousands of rubles	in millions of zlotys	in millions of rubles	in millions of zlotys
1	R-410M (24 channel) tropospheric set	10 sets	600	26.4	6.0	264.0
2	Multiplex devices for telephonic transmission	6 sets	15	0.66	0.09	3.96
3	Connecting cable TKD 19x4xl, 2	50 km	-	0.268 -1 km	-	13.4
4	Reinforced structures for terminal facilities	1	-	13.0	-	13.0
5	Facility for terminal and intermediate ground stations	5	-	1.5	-	7.5
Approximate total cost					6.09	301.86

TS 788136

Copy # 9

~~TOP SECRET~~

~~TOP SECRET~~

-7-

In addition, the cost of using the equipment and maintenance services on an annual basis will amount to about 30 million zlotys, which breaks down to 10 million zlotys for usage and about 20 million for maintenance.

While presenting the above, I am reporting at the same time that the Staff of the Combined Armed Forces is planning, jointly with the General (Main) Staffs, the development in the years 1978-1980 of a detailed organizational-technical design for the tropospheric network, and an agreement and timetable for the completion of the undertaking in the 5-year plan 1981-1985.

Enclosure: Number 1--Proposal for building tropospheric communications lines on the territory of the Polish Peoples' Republic.

Number 2--Tactical-technical data on tropospheric stations.

CHIEF OF SIGNAL TROOPS
Brigadier General Leon KOLATKOWSKI

TS 788136

Copy # 9

~~TOP SECRET~~

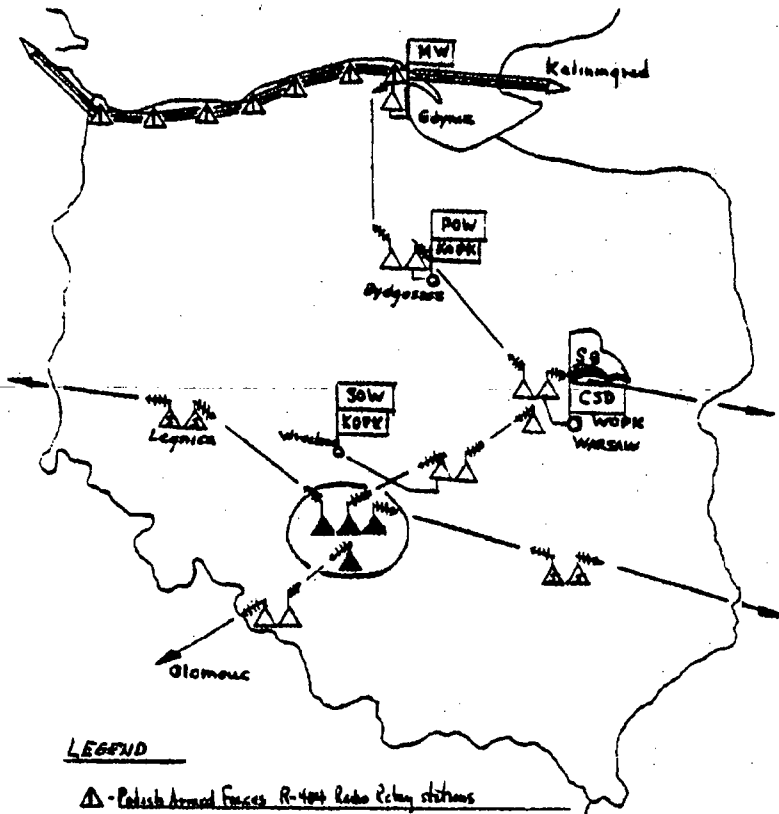
TOP SECRET

- 8 -

Enclosure No. 1

PROPOSALS FOR BUILDING TROPOSPHERIC COMMUNICATIONS
LINES ON THE TERRITORY OF THE POLISH PEOPLE'S REPUBLIC

SECRET



LEGEND

△ - Polish Armed Forces R-404 Radio Relay stations

△ - Polish Armed Forces tropospheric stations

△ - Soviet Army tropospheric stations

△ - tropospheric stations of "the object"

MW - Navy

POW - Pomeranian Military District

KOPK - National Air Defense Corps

SG - The General Staff

CSD WOPK - Central Command Post, National Air Defense Forces

SOW - Silesian Military District

TS 788136

Copy #

9

TOP SECRET

~~TOP SECRET~~

-9-

Enclosure No. 2

SECRET

TACTICAL-TECHNICAL DATA ON THE
R-410M TROPOSPHERIC SET
(new long-range set)

Transmitter power - [REDACTED]

Width of the transmitting band - [REDACTED]

Number of channels - [REDACTED]

Multiplex apparatus - P-304 or P-302--placed at
communications centers
- 24-channel (P-301)

Composition of station - 5 vehicles, including:
(mobile version) 2--URAL-357; apparatus and
amplifier set
3--ZIL-131; two with antennas;
one with additional equipment
for setting up the station
which serves as a recreation
place for the crew after the
station is set up

TS 788136

Copy # 9

~~TOP SECRET~~

~~TOP SECRET~~

-10-

Enclosure No. 2 (Con't)

Types of antenna - I antenna--height of aerial mast is 20 meters; antenna is parabolic with a diameter of 5.5 meters

II antenna--height of aerial mast is 9 meters; parabolic antenna with diameter of 10 meters utilized under permanent conditions

III antenna--height of aerial mast is 6 meters; parabolic antenna with a diameter of 10 meters utilized under permanent conditions

Operating personnel - 15-20 personnel

Time of setting up - 2 hours

Cost of station - 12 channel: about 474,000 rubles--about 20,000,000 zlotys

- 24 channel: about 600,000 rubles--about 26,400,000 zlotys

TS 788136

Copy # 9

~~TOP SECRET~~